

PAT-NO: JP02004238221A

DOCUMENT-IDENTIFIER: JP 2004238221 A

TITLE: PIEZOELECTRIC CRYSTAL MATERIAL AND
PIEZOELECTRIC
OSCILLATOR

PUBN-DATE: August 26, 2004

INVENTOR-INFORMATION:

NAME	COUNTRY
OKAZAKI, MASAKI	N/A
ONOE, MORIO	N/A
SEKIMOTO, HITOSHI	N/A

ASSIGNEE-INFORMATION:

NAME	COUNTRY
NIPPON DEMPA KOGYO CO LTD	N/A

APPL-NO: JP2003026600

APPL-DATE: February 4, 2003

INT-CL (IPC): C30B029/14, H01L041/09 , H01L041/18

ABSTRACT:

PROBLEM TO BE SOLVED: To provide a gallium phosphate piezoelectric material which can attain any desired apex temperature according to the rotation angle of a rotated Y plate, does not generate a secondary oscillation even when it is a small oscillator piece, and can give a smooth quadric frequency vs. temperature curve.

SOLUTION: The piezoelectric crystal material is characterized in that the side face elongated in the X axis direction and cut from an X-Z' plane formed by counterclockwise rotating the X-Z plane of a gallium phosphate crystal by 10 to 20 degrees around the X axis is leaned counterclockwise by 1 to 3